

REMARKS

The applicant's remarks are preceded by related comments of the examiner (shown in bold small type.)

2. Claims 29 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is directed to a computer telephone system, and claim 26 is directed to a service module. Should claims 29 and 30 depend on claim 26 instead claim 1?

The applicant has amended claims 29 and 30.

4. Claims 1-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Katz et al. (U.S. 6,343,086 B1).

As to claims 1, 7, 14, 21, 26, 31 and 33-35, Katz et al., in figs. 2-3 and the description associated with the figures, disclose a method for multi-platform communication in a computer telephony system, the system comprising: computer telephony platforms (PC platforms); service modules (boards 1-4); intra-platform packet routers (MVIP bus 10); and an inter-platform packet router (MVIP-MC1, see col. 6, lines 54-58), each with specific structure and functions as recited in the claims.

The applicant disagrees. It may be true, as the examiner says, that Katz discloses a method for communication in a computer telephony system that includes PC platforms. But the applicant respectfully suggests that the examiner has overstated what Katz discloses or suggests about routers and service modules, and the applicant notes that the examiner has cited nothing from Katz about the resources mentioned in claim 1.

Claim 1 refers to "computer telephony platforms having resources that provide computer telephony services" (emphasis added) and to "service modules residing on each of the platforms, wherein the service modules manipulate the resources according to platform dependent protocols to facilitate performance of the computer telephony services for other service modules". The following passages of the specification of the patent application explains (although by way of only one example that does not limit the scope of the claims, for example, with respect to service modules or resources) the fact that resources and service modules are distinct features (emphasis added):

"A service module 18, 20, 22 performs a function or group of functions under the control of a common state machine. In particular, a service module 18, 20, 22 performs those functions necessary to manipulate, or drive, a respective resource to facilitate performance of one of the computer telephony services.

System 10 is a distributed processing system in which applications require access to resources on multiple platforms. Each service module 18, 20, 22 acts as a server for other client service modules. Thus, a service module may drive a resource to service one of the other service modules. In other words, each service module 18, 20, 22 initiates the performance of a requested service by the resource and obtains any results for communication to either the requesting service module or another service module necessary to complete the requested service. To access a respective resource, each service module 18, 20, 22 is configured to communicate with that resource via a platform-dependent protocol. In addition to operating system-dependent aspects, the platform-dependent protocol may include commands and data structures appropriate for the particular resource. However, service modules 18, 20, 22 accept and generate messages for both intra- and inter-platform communication with other service modules according to a platform-independent protocol. In this manner, client service modules can be isolated from the internal function and structure of particular resources. Consequently, service modules can continue to communicate with one another despite underlying platform changes without significant redevelopment at the inter-platform interface level.

To handle the platform dependencies of a particular resource, each service module 18, 20, 22 is uniquely coded for the resource. For example, each service module 18, 20, 22 may have a platform-dependent interface to the resource that is defined by a set of operational states and transitions, a list of events, commands, and a set of data formats appropriate for the resource."

"The invention can provide a number of advantages. For example, service modules residing on different hardware platforms can access computer telephony resources to facilitate performance of a variety of computer telephony services. Although local access to such resources may be governed by diverse, platform-dependent protocols, the service modules communicate with one another according to a common, platform-independent protocol. In this manner, cross-platform communication is abstracted to isolate system software and firmware from hardware-based platform changes. Thus, software and firmware development can proceed on separate paths from hardware development without the need for significant coordination."

"Packet routers and service modules can be made highly modular and portable to allow extensibility of functions, independence from operating systems, and abstraction from hardware. The packet routers and service modules can be ported across diverse platforms without significant redevelopment. In particular, the packet routers can be coded once for all platforms. In addition, the service modules can be interchanged as appropriate for different platform resources. As a new resource becomes available, for example, a service module can be developed

with appropriate low-level capabilities, and effectively added to the system in a modular manner."

The examiner has cited Katz's boards as being the service modules, but the examiner has not indicated what aspect of Katz corresponds to the claim 1 "resources". In fact, Katz only describes boards that do particular signal processing jobs (for example a vocoder), and he neither describes nor suggests the notion of a service module or a resource let alone any relationship between them such as the relationship recited in claim 1.

Claim 1 also refers to intra-platform packet routers and inter-platform packet routers and to the way in which they route message packets. The examiner points to Katz's MVIP and MVIP-MC1 buses as the intra-platform and inter-platform routers. The MVIP and MVIP-MC1 buses are buses, of course, not routers as the examiner contends. In fact, Katz says essentially nothing about the routers that route packets on the MVIP and MVIP-MC1 buses. To the contrary, he specifically withholds any specifics about how the routers will be configured, preferring to leave those issues to other implementers:

"The payload of the packets, and connection setup beyond MVP switching, are not to be addressed by the standard, permitting vendor considerable freedom in implementing advanced and proprietary features." (col. 6, beginning at line 52)

and

"... a packet standard over MVIP can focus on providing raw bandwidth over fixed links, and leave issues of routing to the nodes or individual boards at the ends of those links, outside the standard." (col. 7, beginning at line 55)

Thus, it is not surprising that Katz says nothing about how to organize routers in a computer telephony system, and, in particular, neither discloses nor suggests the intra-platform packet routers or the inter-platform packet router of claim 1, let alone how those packet routers operate with respect to intra-platform and inter-platform message routing or the manner in which service modules manipulate resources.

Claims 7, 14, 21, 26, 31, and 33 recite the relationship of service modules to resources in a similar way and are patentable for at least the pertinent reasons given for claim 1.

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As to claims 2, 8, 15, 22, 27, 36 and 3, 9, 16, 23, 28, 37, the claimed limitations are standard in the art.

As to claims 4, 10, 17, 24 and 38, it is inherent that each of the resources in Katz et al. comprises one of a hardware device and a software object.

As to claims 5, 13, 20, 25, 29, 32 and 39, the teaching in Katz et al. encompasses the claimed limitations (see fig. 2).

As to claims 6, 11, 12, 18, 19, 30, and 40, the teaching in Katz et al. encompasses the claimed limitations (see col. 1, lines 37-42).

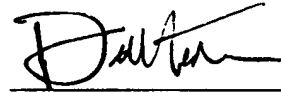
Claims 2 through 6, 8 through 13, 15 through 20, 22 through 25, 27 through 30, 32, and 34 through 40 are patentable for at least the same reasons as the claims on which they depend.

The absence of remarks by the applicant in response to any position of the examiner does represent a concession by the applicant with respect to that position. The inclusion of any argument by the applicant in favor of patentability of a claim is not a concession that there are not other good reasons for patentability of that claim or other claims.

Applicant asks that all claims be allowed. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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Version marked to show changes

29. (amended) The service module of claim [1] 26, wherein the computer telephony services include voice, facsimile, data messaging, video, and multi-media services.

30. (amended) The service module of claim [1] 26, wherein service module maintains a queue for receipt of the message packets, the queue defining an order of processing of the message packets by the service module, wherein the service module is capable of processing message packets received from the other service modules in an interleaved manner.